

# CSCE 625 Programming Assignment 3 Report

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**Honor Code** On my honor, as an Aggie, I have neither given nor received any unauthorized aid on any portion of the academic work included in this assignment.

**Usage** To run the program in prolog, please follow the instructions below:

1. Switch to correct directory: `working_directory(CWD, source_folder)`.
2. Load the program: `['path.pl']`.
3. Load the graph: `['graph.pl']`.
4. Perform query: `path(k, p, P)` or `path(a, e, P)`.

**Example** For the graph below, the shortest path from a to e is a->c->f->e.

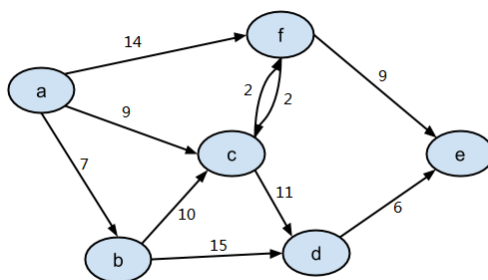


Figure 1: Graph example.

Following the instructions described above, the program will produce an output `P = [a, c, f, e]`.

Another rule `pathWithLength(a, b, P, L)` (`L` is the path length) is also included in the program to check if the path length computed by the program is correct.

## Resources

1. *Simply Logic*. Peter Flach. [https://www.cs.bris.ac.uk/\\$\sim\\$flach/SimplyLogical.html](https://www.cs.bris.ac.uk/$\sim$flach/SimplyLogical.html).
2. *Prolog tutorial*. J. R. Fisher. [http://www.csupomona.edu/\\$\sim\\$jrffisher/www/prolog\\_tutorial/contents.html](http://www.csupomona.edu/$\sim$jrffisher/www/prolog_tutorial/contents.html).
3. *SWI Prolog Manual*. [http://www.swi-prolog.org/pldoc/doc\\_for?object=manual](http://www.swi-prolog.org/pldoc/doc_for?object=manual)